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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,069	03/26/2004	William Blake Kolb	55752US018	3513

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EXAMINER	
RINEHART, KENNETH	

ART UNIT	PAPER NUMBER
3749	

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/810,069	KOLB ET AL.
	Examiner	Art Unit
	Kenneth B Rinehart	3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *27-51* is/are allowed.

6)☒ Claim(s) *1,9-16,22,25,26 and 53* is/are rejected.

7)☒ Claim(s) *2-8,17-21,23 and 24* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/15/04, 7/20/04,* 8/9/04 10/18/04
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 9, 10, 11, 12, 15, 16, 22, 25, 26, 52 are rejected under 35 U.S.C. 102(b) as being anticipated by Vial (713612). Vial shows conveying the substrate past a coating applicator (page 1, line 11) and to a dryer or curing station in a close coupled enclosure or series of interconnected close coupled enclosures while supplying the enclosure or series of enclosures with one or more streams of conditioned gas flowing at a rate sufficient to reduce materially the particle count in the close coupled enclosure (fig. 1, page 2, lines 54-56, positive pressure in the chamber which will inherently reduce the particle count.), at least two close-coupled enclosures have different pressures, temperatures, average headspaces or average footspaces (6, 7, fig. 1), maintaining or establishing a positive pressure in at least one close coupled enclosure and maintaining or establishing a negative pressure in at least one other close coupled enclosure (6, 7, fig. 1, page 2, lines 103-105, page 2, lines 54-56), comprising supplying a conditioned gas stream to at least the first in a series of interconnected close coupled enclosures whereby the conditioned gas is carried along with the moving substrate to a downstream close coupled enclosure or pushed to an upstream enclosure or process (fig. 1, gas will inherently be carried along.), supplying conditioned gas streams to a plurality of close coupled enclosures and withdrawing gas from a plurality of close coupled enclosures (6,7, fig. 1), maintaining a pressure

gradient of at least about -0.5 Pa or higher in a close coupled enclosure (page 2, lines 54-56), maintaining a positive pressure gradient in a close coupled enclosure (page 2, lines 54-56), a first chamber having a gas introduction device is positioned near a control surface (end of 17, fig. 1), a second chamber having a gas withdrawal device is positioned near the control surface (beginning of 10, fig. 1), the control surface and first and second chambers together define a region wherein adjacent gas phases possess an amount of mass (fig. 1, Gas inherently has mass.), at least a portion of the mass from the adjacent gas phases is transported through the gas withdrawal device by inducing a flow through the region (10, fig. 1), and the mass flow can be segmented into the following components: M1 means total net time-average mass flow per unit of substrate width into or out of the region resulting from pressure gradients (page 2, lines 54-56), M1' means the total net time-average mass flow of a gas per unit width into the region through the first chamber from the gas introduction device (end of 17, fig. 1), M2 means the time-average mass flow of conditioned gas per unit width from or into the at least one major surface of the substrate into or from the region (volatile solvent is continuously dried, fig. 1) , M3 means total net time-average mass flow per unit width into the region resulting from motion of the material (This mass flow will inherently occur.), and M4 means time-average rate of mass transport through the gas withdrawal device per unit width (10, fig. 1), flowing a stream of conditioned gas at a rate sufficient to reduce a close enclosure particle count by 75% or more (positive pressure will inherently reduce particle count.), comprising flowing streams of conditioned gas at a rate sufficient to reduce the close enclosure particle counts by 90% or more (positive pressure will inherently reduce particle count.), conveying the substrate past a coating applicator and to a dryer or curing station in a close coupled enclosure or series of interconnected

close coupled enclosures while supplying the enclosure or series of enclosures with one or more streams of conditioned gas flowing at a rate sufficient to cause a material change in a physical property of interest for the atmosphere in the close coupled enclosure (fig. 1, page 1, lines 65-69)

Claim 1, 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Seidl (5528839). Seidl shows conveying the substrate past a coating applicator (col. 2, line 52) and to a dryer or curing station in a close coupled enclosure or series of interconnected close coupled enclosures while supplying the enclosure or series of enclosures with one or more streams of conditioned gas flowing at a rate sufficient to reduce materially the particle count in the close coupled enclosure (fig. 1, col. 3, lines 40-44), supplying conditioned gas streams to a plurality of close coupled enclosures and withdrawing gas from a plurality of close coupled enclosures (fig. 3), supplying conditioned gas streams to each is a series of interconnected close coupled enclosures (fig. 3), sealing the moving substrate at the upstream and downstream ends of a series of interconnected close coupled enclosure (col. 3, lines 40-44).

Claim 53 is rejected under 35 U.S.C. 102(b) as being anticipated by Friedberg (3542640). Friedberg shows An apparatus for coating a moving substrate of indefinite length comprising a coating applicator (17, fig. 1), dryer or curing station and substrate-handling equipment for conveying the substrate past the coating applicator and through the dryer or curing station (26, 15, fig. 1), the substrate being enveloped from at least the coating applicator to the dryer or curing station in a close-coupled enclosure or series of close-coupled enclosures supplied with one or more streams of conditioned gas blowing at a rate sufficient to cause a material change in a physical property of interest for the atmosphere in a close-coupled enclosure (fig. 1, col. 5, line 17-20).

Allowable Subject Matter

Claims 27-51 are allowed.

Claims 2-8, 17-21, 23, and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to driers and clean rooms in general: Seidl (5579590), Russell et al (6375874).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth B Rinehart whose telephone number is 571-272-4881. The examiner can normally be reached on 7:20 -4:20.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 571-272-4881. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KBR

KENNETH RINEHART
PRIMARY EXAMINER